Restoring Marine Habitats and Mending Social Communites

Cynthia Durance, Nikki Wright, SeaChange Marine Conservatoin Society

Keywords: Eelgrass, Restoration, Marine, Community, Stewardship, Conservation

It has been estimated that 18% of coastal salmonid habitat in the Strait of Georgia has been destroyed[1]. Activities such as log storage, marina dredging, shading from over-water structures, and degraded water quality have contributed to the loss. Since most commercially important fish and shellfish spend part of their life histories in eelgrass (*Zostera marina* L.) habitats, including all species of salmon, this loss is significant. Eelgrass reproduction is primarily vegetative, once it is eliminated from an area it is unlikely to return naturally. In estuaries where favorable conditions for eelgrass growth exist, restoration of eelgrass habitat through transplanting may assist with shoreline protection, water quality, and enhance local fish and shellfish stocks.

A program has been developed to encourage and assist stewardship groups with successful eelgrass habitat restoration. The Eelgrass Recovery Program has four components; a catalogue of potential sites, funding, training, and on-site supervision and assistance.

A restoration catalogue will be developed as communities identify potential sites through local knowledge and field surveys. The potential sites will be assessed for their ability to support eelgrass based on the current physical and environmental conditions, and whenever possible an understanding of the impact that led to the loss.

Regional Coordinators will assist groups with securing funding. In addition, development proponents may contribute to local transplanting programs as part of their required Habitat Compensation Plan. The participation of community groups in Habitat Compensation programs will result in the restoration of larger areas, without increased costs.

A scientific advisor will conduct training workshops on eelgrass habitat transplanting and monitoring methods in coastal communities that have assisted with site assessments. The workshops will include the distribution of stewardship materials for community education campaigns.
A team of certified Workers' Compensation Board (WCB) SCUBA divers will accompany the experienced advisor to each location previously assessed to be a suitable restoration site, to complete the transplanting project.

The Eelgrass Recovery Program is in the final stages of development, and will commence in 2005.
With the support of experienced scientists in estuarine systems, community stewardship groups from both sides of the US/Canadian border can be trained to accelerate the pace of reclamation for important marine bird, fish and invertebrate species that utilize these environments for food, protection, and metabolic growth.

[1] British Columbia/Washington Marine Science Panel. 1994. The shared marine waters of British Columbia and Washington: A scientific assessment of current status and future trends in resource abundance and environmental quality in the Strait of Juan de Fuca, Strait of Georgia and Puget Sound. Province of BC, State of Washington. p. 63